



# STARS CLASSES

## Data Science: Deep Learning and Neural Networks in Python

The MOST in-depth look at neural network theory for machine learning, with both pure Python and Tensorflow code

Created by Kirill Eremenko

4.7 ★★★★★ 50,634 students

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**16.99 \$US**

~~84.99 \$US~~

### What you'll learn

- ✓ Learn how Deep Learning REALLY works (not just some diagrams and magical black box code)
- ✓ Learn how a neural network is built from basic building blocks (the neuron)
- ✓ Code a neural network from scratch in Python and numpy
- ✓ Code a neural network using Google's TensorFlow
- ✓ Describe different types of neural networks and the different types of problems they are used for
- ✓ Derive the backpropagation rule from first principles
- ✓ Create a neural network with an output that has  $K > 2$  classes using softmax
- ✓ Describe the various terms related to neural networks, such as "activation", "backpropagation" and "feedforward"
- ✓ Install TensorFlow

# Course content

14 sections • 89 lectures • 11h 16m total length

Chapter 1: Welcome

Chapter 2: Review

Chapter 3: Preliminaries: From Neurons to Neural Networks

Chapter 4: Classifying more than 2 things at a time

Chapter 5: Training a neural network

Chapter 6: Practical Machine Learning

Chapter 7: TensorFlow, exercises, practice, and what to learn next

Chapter 8: Project: Facial Expression Recognition

Chapter 9: Backpropagation Supplementary Lectures

Chapter 10: Higher-Level Discussion

Chapter 11: Setting Up Your Environment (FAQ by Student Request)

Chapter 12: Extra Help With Python Coding for Beginners (FAQ by Student Request)

Chapter 13: Effective Learning Strategies for Machine Learning (FAQ by Student Request)

Chapter 14: Appendix/ FAQ Finale

## Requirements

- Basic math (calculus derivatives, matrix arithmetic, probability)
- Install Numpy and Python
- Don't worry about installing TensorFlow, we will do that in the lectures.
- Being familiar with the content of my logistic regression course (cross-entropy cost, gradient descent, neurons, XOR, donut) will give you the proper context for this course

## Who this course is for

Students interested in machine learning - you'll get all the tidbits you need to do well in a neural networks course

Professionals who want to use neural networks in their machine learning and data science pipeline. Be able to apply more powerful models, and know its drawbacks.

Featured review



Everything about

Courses Details



### This courses includes

- 📺 11.5 hours on-demand video
- ♾️ Full lifetime access
- 📱 Mobile and TV access
- 📄 End of training certificate

### Contact Us

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